

# Swaroop Thikane

Abdul Lat, Maharashtra, 416143 | 9766560792 | [swaroopthikane@gmail.com](mailto:swaroopthikane@gmail.com)  
| LinkedIn <https://www.linkedin.com/in/swaroop-thikane-46a846296> | DOB-09/06/2004

## Projects

### SmartBag

- Developed a prototype of smart bag which involved features like location tracking, inventory management etc. Have a very good experience in GSM, GPS modules and working. Also mastered the RFID systems.

### Filament Maker

- Found out a solution for reuse of waste pet bottles. Developed a system which would convert waste pet bottles into 3d printable filaments Used Stepper motors, motor drivers, Relay as switch.

### IoT Based Pearl Farm Health Regulator

- This innovative system aims to enhance pearl production by monitoring and regulating critical water quality parameters, including pH, Total Dissolved Solids (TDS), and oxygen levels. Additionally, the system will automate the feeding of green algae, which is essential for pearl formation. Also has secured **fellowship of six lakh Rupees from TIH Chanakya Fellowship 2024** for the same project.

### KrishiCobot

- KrishiCobot is an agriculture-assistive robot that automates fertilizer refilling, crop shape detection, and fruit sorting using a UR5 robotic arm and camera integration. It ensures efficient farming by detecting plant conditions, adding fertilizer when required, and sorting good fruits from rotten ones.

## Certifications

- Introduction to Internet of Things IIT Bombay
- Principles Of Management NPTEL
- CLA Programming essentials in C
- Industrial Training at Kulkarni Power Tools Ltd.

## Achievements

- Received Fellowship of amount **Rs. Six Lakhs under the TIH-IoT Chanakya Fellowship Program 2024**
- Design Patent Granted:** IoT Based Pearl Farming Device Design No. 454051-001
- Utility Patent Published:** Smart Bag System for Enhanced Safety, Organization And Educational Engagement in School Children Application No. 202421041453
- Mini Project Competition 2023-24 (Winner)
- NRIIT Ideathon Competition (Finalist)
- Ideathon by DKTE (Winner)
- Best Idea presenter at Ideation Workshop

## Education

### B.Tech: Electronics and Telecommunication Engineering

D.K.T.E's Textile & Engineering Institute

- Expected Graduation : 2026
- CGPA: 7.82

### Higher Secondary Certificate

Balaji Madhyamik Vidyalay & Jr. College

- Passing year : 2022
- Score : 77.33%

### Central Board of Secondary Education

Shri Balaji Public School Takawade

- Passing year : 2020
- Score : 82.00%

## Additional Information

### IEEE SB Chapter – Treasurer

Coordinated events, managed funding, collected sponsorships

### COMSA – President

Organized technical workshops, competitions, and activities to enhance student engagement.

## Internship

### Kulkarni Power Tools Ltd.

Explored power electronics and studied IGBT based welding machines and power devices

## Technical Skills

- C/C++
- Verilog & VHDL Programming
- Embedded C
- Java
- DSA
- Prototyping
- IoT

## Research Paper Publication

- Paper Title: IoT Based Pearl Farm Health Regulator - **Provisionally accepted in ICFT2025(IEEE)**
- Paper Title: IoT Based Pearl Farm Health Regulator- **Provisionally accepted in ETET 2025(SCOPUS)**